

**REMARKS**

**Summary of the Office Action**

Claims 1-3 and 5-7 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by *Corisis et al.* (U.S. Patent Publication No. 2003/0189257).

Claim 4 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Corisis et al.*

Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Corisis et al.* in view of *Miyagawa* (U.S. Patent No. 6,780,023).

**Summary of the Response to the Office Action**

Applicants respectfully submit that the rejections of claims 1-8 under 35 U.S.C. §§ 102(e) and 103(a) are improper, and therefore should be withdrawn. Moreover, Applicants have added new independent claim 12. Accordingly, claims 1-8 and 12 are pending in this application for further consideration with claims 9-11 being withdrawn from consideration.

**The Rejections under 35 U.S.C. §§ 102(e) and 103(a)**

Claims 1-3 and 5-7 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by *Corisis et al.* Claim 4 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Corisis et al.* Claim 8 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Corisis et al.* in view of *Miyagawa*. Applicants respectfully traverse the rejections for at least the following reasons.

With respect to independent claims 1 and 2, Applicants respectfully submit that *Corisis et al.* does not teach or suggest a claimed combination including at least a feature that “an entire exposed surface of the center-bonding pads is covered by the edge-bonding metal patterns.”

The Office Action on page 7 alleges that “Applicant’s arguments filed 8/11/05 have been fully considered, but are not found to be persuasive,” and “in figure 4, the edge bonding metal patterns 44, clearly shows covering the center bonding pads 34 as detailed above in reference to *Corisis et al.*” (Emphasis Added). Applicants respectfully disagree.

First, in *Corisis et al.*, the reference numeral 44 denotes electrically conductive vias, which are NOT the edge-bonding metal patterns. Further, the Office Action suggests the conductive traces 45 as the claimed “edge-bonding metal patterns.” As illustrated in FIG. 1 of *Corisis et al.*, the conductive traces 45, allegedly as the claimed “edge-bonding metal patterns,” are merely arranged between the conductive vias 44 and contact pads 47. In such an arrangement as shown in FIG. 1, therefore, the conductive traces 45 cannot cover the entire surface of the bond pads 34.

Second, while FIG. 4 appears to show that the conductive vias 44 cover the bond pads 34, the conductive vias 44 inherently cannot cover, but in fact expose, the bond pads 34 through their holes. Even if the conductive vias 44 are regarded as the edge-bonding metal patterns or part of the conductive traces 45, they still do not cover the bond pads 34 as shown in FIG. 3.

Accordingly, in contrast to the present invention of independent claims 1 and 2, *Corisis et al.* fails to show or even to teach or suggest that the conductive traces 45 (allegedly corresponding to the claimed “edge-bonding metal patterns”) covers an entire exposed surface of

the connecting bond pads 34 (allegedly corresponding to the claimed “center-bonding pads”). In other words, Applicants respectfully submit that *Corisis et al.* does not show the claimed combination including at least the feature that “an entire exposed surface of the center-bonding pads is covered by the edge-bonding metal patterns,” as recited by each of independent claims 1 and 2.

In addition, the Office Action does not rely on *Miyagawa* to remedy any aspect of the above-noted deficiencies of *Corisis et al.* Moreover, Applicants respectfully submit that *Miyagawa* cannot remedy the deficiencies of *Corisis et al.* That is, *Corisis et al.* and *Miyagawa*, whether taken individually or in combination, do not teach or suggest the claimed combination including at least the above-described feature recited in each of independent claims 1 and 2.

Accordingly, for at least the forgoing reasons, Applicants respectfully assert that the rejections of independent claims 1 and 2 under 35 U.S.C. § 102(e) should be withdrawn because each of the applied references does not teach or suggest each and every feature of independent claims 1 and 2. As pointed out in MPEP § 2131, “[t]o anticipate a claim, the reference must teach every element of the claim.” Thus, “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros. v. Union Oil Co. Of California, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987).” Furthermore, Applicants respectfully assert that dependent claims 3-8 are allowable at least because of their dependencies from independent claim 2 and the reasons set forth above.

**New Claim 12**

Applicants have added new claim 12 to further define the invention. Applicants respectfully submit that new claim 12 is allowable over the prior art of record based on the reasons set forth above.

Moreover, with respect to new independent claim 12, Applicants respectfully submit that *Corisis et al.* does not teach or suggest a claimed combination including at least the recited feature that “an entire exposed surface of the center-bonding pads is in contact with the edge-bonding metal patterns.” As described above, even if the conductive vias 44 may be considered as a portion of the conductive traces 45, which is allegedly suggested as the claimed “edge bonding metal patterns”, the conductive vias 44 is disposed over the bond pads 34 with a predetermined gap. In contrast to the present invention wherein the edge-bonding patterns are disposed on the bond pads in contact, *Corisis et al.* fails to teach or suggest that the conductive vias 44 is in contact with the bond pads 34. In other words, Applicants respectfully submit that *Corisis et al.* fails to teach or suggest at least the above-noted feature of new independent claim 12.

With no other rejections pending, Applicants respectfully assert that claims 1-8 and 12 are in condition for allowance.

**Conclusion**

In view of the foregoing, Applicants respectfully request reconsideration and the timely

allowance of the pending claims. Should the Examiner feel that there are any issues outstanding after consideration of the response, the Examiner is invited to contact the Applicants' undersigned representative to expedite prosecution.

**Except** for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0310.

Respectfully submitted,

**MORGAN, LEWIS & BOCKIUS LLP**

Dated: November 30, 2005

By: 

Xiaobin You  
Reg. No. L0112

**Customer No. 009629**  
**MORGAN, LEWIS & BOCKIUS LLP**  
1111 Pennsylvania Avenue, NW  
Washington, DC 20004  
Tel: 202.739.3000